

Table 3.7a. Reach by Reach Tributary Descriptions, Land Use, Cultural Resources, and Biological Resources

Reach Number	Reach Name	Corresponding Reaches	Adjacent Land Use	Future Land Use	Cultural Resources	Vegetation and Wildlife Habitat Elements	Adjacent Wetlands/Tributaries	Fisheries Habitat Elements
Dry Creek by Reach								
1	Steelhead Creek (Natomas East Main Drainage) Canal to the Downstream Confluence of the South and North Channels					<p>A high concentration of riparian vegetation is reported at the confluence of Dry Creek and Steelhead Creek. Moving upstream, thinner riparian corridors, at spots discontinuous, are associated with the main Dry Creek channel and the secondary channel. Typical species composition includes:</p> <p><u>Tree species (overstory)</u>: Valley oak (<i>Quercus lobata</i>), box elder (<i>Acer negundo</i>), Fremont cottonwood (<i>Populus fremontii</i>), button willow (<i>Cephalanthus occidentalis californicus</i>), arroyo willow (<i>Salix lasiolepis</i>), shining willow <i>Š. lucida</i>), and Oregon ash (<i>Fraxinus latifolia</i>).</p> <p><u>Shrub species (small tree layer)</u>: Himalayan blackberry (<i>Rubus discolor</i>) and wild grape (<i>Vitis californicus</i>).</p> <p><u>Understory species</u>: poison oak (<i>Toxicodendron diversilobum</i>).</p> <p><u>Perennial marsh species</u> include water primrose (<i>Ludwigia palustris</i>), tules (<i>Scirpus spp.</i>), cattails (<i>Typha sp.</i>), sedges (<i>Carex spp.</i>), water smartweed (<i>Polygonum amphibium</i>), nutsedges (<i>Cyperus spp.</i>), and smooth cocklebur (<i>Xanthium strumarium</i>). Seasonal wetland species include perennial ryegrass (<i>Lolium perenne</i>), popcorn flower (<i>Plagiobothrys stipitatus</i>), Fremont's goldfields (<i>Lasthenia fremontii</i>), pincushion navarretia (<i>Navaretia leucocephala</i>), and downingia (<i>Downingia spp.</i>). The seasonal wetland species reported above, are also expected to occur there.<sup>1</sup></p>	Perennial marsh, seasonal marsh, and seasonal wetland communities are also on the margins of Dry Creek. North of the channel, on the Hansen Ranch property, there are vernal pools.	
2	Dry Creek South Channel – Downstream Confluence of the South and North Channels to Elkhorn Blvd.	Foothill and Associates' Reaches F and G.	High school on east bank, horse riding arena on west bank (with degraded vegetation), and cattle grazing in southwest area (understory very sparse) <sup>1</sup> .		None noted.	<p><u>Tree Species (Overstory)</u>: Mostly valley oak (<i>Quercus lobata</i>), some Fremont's cottonwood (<i>Populus fremontii</i>), Oregon ash (<i>Fraxinus latifolia</i>), and sandbar willow (<i>Salix exigua</i>). Regeneration: Generally very little, except in area shown on map (not attached to this document).</p> <p><u>Shrub Species (small tree layer)</u>: Sparse sandbar willow (<i>Salix exigua</i>) and Himalayan blackberry (<i>Rubus discolor</i>).</p> <p><u>Understory Species</u>: Very sparse Tall fescue (<i>Festuca arundinacea</i>), Creeping wildrye (<i>Leymus triticoides</i>), Santa Barbara sedge (<i>Carex barbarae</i>), annual grasses, and Yellow star-thistle (<i>Centaurea solstitialis</i>).<sup>1</sup></p>	None noted.	This has not been studied on a reach specific basis; but this area is generally believed to only provide a migration corridor for anadromous salmonids. Other fish may be present year round.
3	Dry Creek South Channel - Elkhorn Blvd. to Dry Creek Road	Foothill and Associates' Reach E.	Safflower field and degraded vegetation at the parking area along Elkhorn Boulevard. <sup>1</sup>		None noted.	<p><u>Tree Species (Overstory)</u>: Mostly Valley Oak (<i>Quercus lobata</i>), with especially good stand in southwest sector. Goodding's black willow (<i>Salix gooddingii</i>), Fremont's cottonwood (<i>Populus fremontii</i>), and California black walnut (<i>Juglans californica</i>) also represented. English walnut (<i>Juglans regia</i>), cultivated fruit trees (<i>Prunus spp.</i>) and pomegranates (<i>Punica granatum</i>) were also found. Regeneration: Very good in southwest sector.</p> <p><u>Shrub Species (small tree layer)</u>: Valley oak (<i>Quercus lobata</i>) and sandbar willow (<i>Salix exigua</i>) were present.</p> <p><u>Understory Species</u>: Tall fescue (<i>Festuca arundinacea</i>) in the lower stretch, creeping wildrye (<i>Leymus triticoides</i>), Santa Barbara sedge (<i>Carex barbarae</i>), Bermuda grass (<i>Cynodon dactylon</i>), and yellow star-thistle (<i>Centaurea solstitialis</i>).</p> <p><u>Wildlife Observations</u>: Hummingbirds, jays, and doves were noted.<sup>1</sup></p>	None were noted.	This has not been studied on a reach specific basis; but, this area is generally believed to only provide a migration corridor for anadromous salmonids. Other fish may be present year round.

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4	Dry Creek South Channel - Dry Creek Road to Q Street	Foothill and Associates' Reach D.	Fields on the west bank, orchards and small ranches on the east bank. <sup>1</sup>		None noted.	<u>Tree Species (Overstory):</u> The canopy is 70-80% closed, dominated by Valley oak ( <i>Quercus lobata</i> ), well represented by Oregon ash ( <i>Fraxinus latifolia</i> ), with fewer individuals of interior live oak ( <i>Quercus wislizenii</i> ), California black walnut ( <i>Juglans californica</i> ), Fremont's cottonwood ( <i>Populus fremontii</i> ), and sandbar willow ( <i>Salix exigua</i> ). Regeneration: Good regeneration of Valley oak ( <i>Quercus lobata</i> ), sandbar willow ( <i>Salix exigua</i> ), and Fremont's cottonwood ( <i>Populus fremontii</i> ) in excavated channel. <u>Shrub Species (small tree layer):</u> Sapling Oregon ash ( <i>Fraxinus latifolia</i> ), Poison oak ( <i>Toxicodendron diversilobum</i> ), and California button willow ( <i>Cephalanthus occidentalis</i> ). <u>Understory Species:</u> Well represented with natives, including mugwort ( <i>Artemisia douglasiana</i> ), Creeping wildrye ( <i>Leymus triticoides</i> ), Santa Barbara sedge ( <i>Carex barbarae</i> ), Mexican tea ( <i>Chenopodium ambrosioides</i> ), Willow-herb ( <i>Epilobium</i> sp.); various exotics, including annual grasses, Himalayan blackberry ( <i>Rubus discolor</i> ) and prickly lettuce ( <i>Lactuca serriola</i> ). <u>Wildlife Observations:</u> Barn owl, turtles, red-tailed hawk, beaver signs, great blue heron, and raccoon tracks were observed. <sup>1</sup>	None were noted.	This has not been studied on a reach specific basis; but, this area is generally believed to only provide a migration corridor for anadromous salmonids. Other fish may be present year round.
5	Dry Creek South Channel - Q Street to the Downstream End of Cherry Island Golf Course (approximately U Street)	Foothill and Associates' Reach C.	Agricultural development in the interior, mostly agricultural-resident on east bank. Several houses and sheds are near the east bank.		None noted.	<u>Tree Species (Overstory):</u> Dominated by good stands of Valley oak ( <i>Quercus lobata</i> ), Oregon ash ( <i>Fraxinus latifolia</i> ), willow species ( <i>Salix</i> spp.) and Fremont's cottonwood ( <i>Populus fremontii</i> ). <u>Shrub Species (small tree layer):</u> Young Oregon ash ( <i>Fraxinus latifolia</i> ), some Himalayan blackberry ( <i>Rubus discolor</i> ), and California rose ( <i>Rosa californica</i> ). <u>Understory Species:</u> Santa Barbara sedge ( <i>Carex barbarae</i> ), Creeping wildrye ( <i>Leymus triticoides</i> ), annual grasses, mugwort ( <i>Artemisia douglasiana</i> ), Mexican tea ( <i>Chenopodium ambrosioides</i> ), sweet fennel ( <i>Foeniculum vulgare</i> ), sprangletop ( <i>Leptochloa</i> sp.), and rice cutgrass ( <i>Leersia oryzoides</i> ). <u>Wildlife Observations:</u> Kingfisher, mallard ducks, red-tailed hawks, black-shouldered kites, etc. <sup>1</sup>	None noted.	This has not been studied on a reach specific basis; but, this area is generally believed to only provide a migration corridor for anadromous salmonids. Other fish may be present year round.
6	Dry Creek South Channel - Downstream End of Cherry Island Golf Course to the Upstream Confluence of the South and North Channel	Foothill and Associates' Reach B.	Golf course and soccer complex. <sup>1</sup> Additionally, the riparian zone has generally been protected by placement of protective fencing; but, in some areas, the fairway and golf path are fairly close to creek bank. <sup>1</sup>		Not noted.	<u>Tree Species (Overstory):</u> Good development of Valley oak ( <i>Quercus lobata</i> ), Oregon ash ( <i>Fraxinus latifolia</i> ), Goodding's black willow ( <i>Salix gooddingii</i> ), Interior live oak ( <i>Quercus wislizenii</i> ), and some sandbar willow ( <i>Salix exigua</i> ). Regeneration: Oregon ash ( <i>Fraxinus latifolia</i> ), moderate Valley oak ( <i>Quercus lobata</i> ). <u>Shrub Species (small tree layer):</u> Oregon ash ( <i>Fraxinus latifolia</i> ), Poison oak ( <i>Toxicodendron diversilobum</i> ), California button willow ( <i>Cephalanthus occidentalis</i> ), willow species ( <i>Salix</i> sp.), and Himalayan blackberry ( <i>Rubus discolor</i> ). <u>Understory Species:</u> Santa Barbara sedge ( <i>Carex barbarae</i> ), Creeping wildrye ( <i>Leymus triticoides</i> ), Mugwort ( <i>Artemisia douglasiana</i> ) on bench, rice cutgrass ( <i>Leersia oryzoides</i> ), willow-herb ( <i>Epilobium</i> sp.), Beggar's tick ( <i>Bidens</i> sp.), and sprangletop ( <i>Leptochloa</i> sp.) close to the creek. <u>Wildlife Observations:</u> Mallards, bushtits, great blue herons, and green-backed heron. Many bird species make use of the blue oaks within the golf course. <sup>1</sup>	Sierra Creek (may also be known as Goat Creek) enters into this reach from the east.	This has not been studied on a reach specific basis; but, this area is generally believed to only provide a migration corridor for anadromous salmonids. Other fish may be present year round.
7	Dry Creek North Channel - Downstream Confluence of the South and North Channels to Elkhorn Blvd.	Foothill and Associates' Reach M.	Small ranches, pastures, grasslands. <sup>1</sup>		None noted.	<u>Tree Species (Overstory):</u> Dominated mostly by a sparse cover of Valley oak ( <i>Quercus lobata</i> ), with Oregon ash ( <i>Fraxinus latifolia</i> ), and a few Fremont's cottonwood ( <i>Populus fremontii</i> ), and sandbar willow ( <i>Salix exigua</i> ). Regeneration: Very sparse. <u>Shrub Species (small tree layer):</u> Very Sparse. <u>Understory Species:</u> Sprangletop ( <i>Leptochloa</i> sp.), cocklebur species ( <i>Xanthium</i> sp.), Bermuda grass ( <i>Cynodon dactylon</i> ), sunflower species ( <i>Helianthus</i> sp.), Polygonum sp. on dry creek bottom, annual grasses, common canary grass ( <i>Phalaris canariensis</i> ), with mugwort ( <i>Artemisia douglasiana</i> ) on banks. <u>Wildlife Observations:</u> Red-shouldered hawk, magpie, and quail. <sup>1</sup>	None noted.	This has not been studied on a reach specific basis; but, this area is generally believed to only provide a migration corridor for anadromous salmonids. Other fish may be present year round.

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8	Dry Creek North Channel - Elkhorn Blvd. to Dry Creek Road	Foothill and Associates' Reach L.	Many small lots/subdivisions with houses and sheds 10-30 yards from top of bank. <sup>1</sup>		None noted.	<u>Tree Species (Overstory):</u> The riparian zone dominated approximately 50-60% overstory Valley oak ( <i>Quercus lobata</i> ), Oregon ash ( <i>Fraxinus latifolia</i> ), sandbar willow ( <i>Salix exigua</i> ), Fremont's cottonwood ( <i>Populus fremontii</i> ), and a few Goodding's black willow ( <i>Salix gooddingii</i> ). Occasional Mulberry ( <i>Morus alba</i> ), Acacia sp., and eucalyptus ( <i>Eucalyptus</i> sp.). Regeneration: Relatively poor. <u>Shrub Species (small tree layer):</u> Sapling Oregon ash ( <i>Fraxinus latifolia</i> ) and Sandbar willow ( <i>Salix exigua</i> ). <u>Understory Species:</u> Stream bed with water primrose ( <i>Ludwigia peploides</i> ), cocklebur species ( <i>Xanthium</i> sp.), sprangletop ( <i>Leptochloa</i> sp.), Polygonum sp., nutsedge ( <i>Cyperus esculentus</i> ), Sunflower species ( <i>Helianthus</i> sp.) and Sweet fennel ( <i>Foeniculum vulgare</i> ). Stream bank vegetation poorly developed, with Himalayan blackberry ( <i>Rubus discolor</i> ) and mostly annual grasses and other exotics. <u>Wildlife Observations:</u> Quail, pheasants, bushtits, scrub jays, and turkey vultures. <sup>1</sup>	None noted.	This has not been studied on a reach specific basis; but, this area is generally believed to only provide a migration corridor for anadromous salmonids. Other fish may be present year round.
9	Dry Creek North Channel - Dry Creek Road to Q Street	Foothill and Associates' Reach K.	Several buildings very close to bank. <sup>1</sup>		None noted.	<u>Tree Species (Overstory):</u> Riparian overstory dominated by Valley oak ( <i>Quercus lobata</i> ), well represented by Oregon ash ( <i>Fraxinus latifolia</i> ) and Sandbar willow ( <i>Salix exigua</i> ), with fewer numbers of Fremont's cottonwood ( <i>Populus fremontii</i> ), Goodding's black willow ( <i>Salix gooddingii</i> ), Arroyo willow ( <i>Salix lasiolepis</i> ), Blue oak ( <i>Quercus douglasii</i> ) and a few Tree-of-heaven ( <i>Ailanthus altissima</i> ). Regeneration: Mostly re-sprouting Oregon ash ( <i>Fraxinus latifolia</i> ). <u>Shrub Species (small tree layer):</u> Many sapling Oregon ash ( <i>Fraxinus latifolia</i> ). <u>Understory Species:</u> Cocklebur species ( <i>Xanthium</i> sp.), Beggar's tick ( <i>Bidens</i> sp.), prickly lettuce ( <i>Lactuca serriola</i> ), annual grasses, Bermuda grass ( <i>Cynodon dactylon</i> ), Santa Barbara sedge ( <i>Carex barbarae</i> ). <u>Wildlife Observations:</u> Several snags that indicate wildlife habitat. <sup>1</sup>	None noted.	This has not been studied on a reach specific basis; but, this area is generally believed to only provide a migration corridor for anadromous salmonids. Other fish may be present year round.
10	Dry Creek North Channel - Q Street to Downstream End of Cherry Island Golf Course (approximately Trading Post Court)	Foothill and Associates' I and J.	Grazing pasture on outside bank, unmanaged grasslands on inside. <sup>1</sup>		None noted.	<u>Tree Species (Overstory):</u> Goodding's black willow ( <i>Salix gooddingii</i> ), Valley oak ( <i>Quercus lobata</i> ), Oregon ash ( <i>Fraxinus latifolia</i> ), Fremont's cottonwood ( <i>Populus fremontii</i> ), California button willow ( <i>Cephalanthus occidentalis</i> ), California black walnut ( <i>Juglans californica</i> ). Occasionally fig ( <i>Ficus carica</i> ) and mulberry ( <i>Morus alba</i> ). Regeneration: Valley Oak ( <i>Quercus lobata</i> ), Oregon ash ( <i>Fraxinus latifolia</i> ), Goodding's black willow ( <i>Salix gooddingii</i> ). Especially good regeneration near Q Street. <u>Shrub Species (small tree layer):</u> Oregon ash ( <i>Fraxinus latifolia</i> ), Goodding's black willow ( <i>Salix gooddingii</i> ), young Oregon ash ( <i>Fraxinus latifolia</i> ), California button willow ( <i>Cephalanthus occidentalis</i> ), California rose ( <i>Rosa californica</i> ). <u>Understory Species:</u> annual grasses, Creeping wildrye ( <i>Leymus triticoides</i> ), Mugwort ( <i>Artemisia douglasiana</i> ), Santa Barbara sedge ( <i>Carex barbarae</i> ), Santa Barbara sedge ( <i>Carex barbarae</i> ), Mexican tea ( <i>Chenopodium ambrosioides</i> ), Sweet fennel ( <i>Foeniculum vulgare</i> ), Cocklebur species ( <i>Xanthium</i> sp.), water primrose ( <i>Ludwigia peploides</i> ), Willow species ( <i>Salix</i> sp.), Yellow star-thistle ( <i>Centaurea solstitialis</i> ) and sprangletop ( <i>Leptochloa</i> sp.) on channel bottom channel bottom	None noted.	This has not been studied on a reach specific basis; but, this area is generally believed to only provide a migration corridor for anadromous salmonids. Other fish may be present year round.

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11	Dry Creek North Channel - Downstream End of Cherry Island Golf Course (approximately Trading Post Court) to the Upstream Confluence of the South and North Channels	Foothill and Associates' Reach H.	Golf course on the east side, housing development on the west. Evidently the placement of housing on steep banks lessens human intrusions. <sup>1</sup>		None noted.	<u>Tree Species (Overstory):</u> Mostly Valley oak ( <i>Quercus lobata</i> ), but also some interior live oak ( <i>Quercus wislizenii</i> ), arroyo willow ( <i>Salix lasiolepis</i> ), sandbar willow ( <i>Salix exigua</i> ), California black walnut ( <i>Juglans californica</i> ), Oregon ash ( <i>Fraxinus latifolia</i> ), and some blue oak ( <i>Quercus douglasii</i> ) on upper banks. Regeneration: Excellent Valley oak <i>Quercus lobata</i> ). <u>Shrub Species (small tree layer):</u> Oregon ash ( <i>Fraxinus latifolia</i> ), California button willow ( <i>Cephalanthus occidentalis</i> ), Himalayan blackberry ( <i>Rubus discolor</i> ), and poison oak ( <i>Toxicodendron diversilobum</i> ). <u>Understory Species:</u> Annual grasses, Mugwort ( <i>Artemisia douglasiana</i> ), Mexican tea ( <i>Chenopodium ambrosioides</i> ), yellow star-thistle ( <i>Centaurea solstitialis</i> ), creeping wildrye ( <i>Leymus triticoides</i> ), Santa Barbara sedge ( <i>Carex barbarae</i> ), field mint ( <i>Mentha arvensis</i> ), beggar's tick ( <i>Bidens</i> sp.), rice cutgrass ( <i>Leersia oryzoides</i> ), sprangletop ( <i>Leptochloa</i> sp.), willow-herb ( <i>Epilobium</i> sp.), water primrose ( <i>Ludwigia peploides</i> ), and rough horsetail ( <i>Equisetum hyemale</i> ). <sup>1</sup>	None noted.	This has not been studied on a reach specific basis; but, this area is generally believed to only provide a migration corridor for anadromous salmonids. Other fish may be present year round.
12	Upstream Confluence of the South and North Channels to Watt Ave.	The Placer – Sacramento County line crosses this reach. Bishop assessed from Watt Ave. to the Placer County line (Bishop's Reach 1);Foothill and Associates assessed the Sacramento County portion (Foothill and Associates Reach A).	Gibson Ranch, especially levee, constricts riparian zone on west bank. Cement pilings were present on east bank. Extensive grassland area on East side. <sup>1</sup>	Riparian corridor and urban development likely. <sup>2</sup> East bank slated for golf course development. <sup>1</sup>	None noted.	<u>Tree Species (Overstory):</u> Riparian community dominated by Valley oak ( <i>Quercus lobata</i> ), but with moderate representation of willow species ( <i>Salix spp.</i> ), Oregon ash ( <i>Fraxinus latifolia</i> ), interior live oak ( <i>Quercus wislizenii</i> ), one nice stand of Fremont's cottonwood <i>Populus fremontii</i> ), and a few California black walnut ( <i>Juglans californica</i> ), and a few black locust ( <i>Robinia pseudoacacia</i> ). Regeneration: Good reproduction of Valley Oak ( <i>Quercus lobata</i> ) and Blue oak ( <i>Quercus douglasii</i> ) on east side. <u>Shrub Species (small tree layer):</u> Thick development, especially on east side, with stands of Himalayan blackberry ( <i>Rubus discolor</i> ), Blue elderberry ( <i>Sambucus mexicana</i> ), California Rose ( <i>Rosa californica</i> ), Oregon ash ( <i>Fraxinus latifolia</i> ), and exotic Cultivated fruit tree ( <i>Prunus</i> sp.) California button willow ( <i>Cephalanthus occidentalis</i> ) abundant adjacent to creek. <u>Understory Species:</u> Good native stand development, including Creeping wildrye ( <i>Leymus triticoides</i> ), Clustered field sedge ( <i>Carex praegracilis</i> ), Santa Barbara sedge ( <i>Carex barbarae</i> ), Mugwort ( <i>Artemisia douglasiana</i> ), Mexican tea ( <i>Chenopodium ambrosioides</i> ), Pipevine ( <i>Aristolochia californica</i> ). Exotics include typical annual grasses, Bermuda grass ( <i>Cynodon dactylon</i> ), Jimson weed ( <i>Datura</i> sp.), Vetch ( <i>Vicia</i> sp.) and Sweet fennel ( <i>Foeniculum vulgare</i> ). <u>Wildlife Observations:</u> Many dead snags, especially cottonwood (beaver girdled, now used by woodpeckers). Red-headed woodpeckers, black-shouldered kites, quail, scrub jay, turkey vultures, etc. East bank grasslands good as raptor feeding area. <sup>1</sup>	One unnamed tributary	This has not been studied on a reach specific basis; but, this area is generally believed to only provide a migration corridor for anadromous salmonids. Other fish may be present year round. There is a "rubble dam" just downstream of the Watt Ave. bridge that may be a barrier to fish passage at low flows.
13	Watt Ave. to Walerga Road	Bishop's Reach 2.	Open space, rural residential and cattle grazing. <sup>2</sup>	Potential future land uses are riparian corridor and urban development. <sup>2</sup>	None noted.	Riparian scrub, non-native grassland, and significant remnant mixed oak woodland forest. There were areas of heavy grazing with sparse understory and the non-native species included, bamboo, Himalayan blackberry ( <i>Rubus discolor</i> ) and stands of Eucalyptus ( <i>Eucalyptus</i> sp.). <sup>2</sup>	One unnamed tributary joins	This has not been studied on a reach specific basis; but, this area is generally believed to only provide a migration corridor for anadromous salmonids. Other fish may be present year round.
14	Walerga Road to Cook Riolo Road	Bishop's Reach 3.	Open space, rural residential, and orchard. <sup>2</sup>	Potential future land are riparian corridor and urban development. <sup>2</sup>	None noted.	Riparian scrub and non-native grassland. Non-native species include Himalayan blackberry and ornamentals. <sup>2</sup>	Two unnamed tributaries	This has not been studied on a reach specific basis; but, this area is generally believed to only provide a migration corridor for anadromous salmonids. Other fish may be present year round.
15	Cook Riolo Road to Roseville Wastewater Treatment Plant Outfall	Bishop's Reach 4 and the 1993 Vanicek study reach DC-1a.	Open space, cattle grazing, and rural residential. <sup>2</sup>		None noted.	Riparian scrub, non-native grassland, and oak forest. <sup>2</sup>	Two unnamed tributaries	Mostly flatwater and shallow pools. <sup>5</sup> A few deep (1 <sup>st</sup> class) pools are present, each representing a "low velocity resting area for several adult Chinook salmon". Stream flow is significantly augmented by discharge from Roseville Wastewater Treatment Plant (RWWTP). The reach was given an overall ranking of 2, which corresponds to fair to poor quality.

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16	Roseville Wastewater Treatment Plant Outfall to Vernon Street	Bishop's Reach 5 and the Vanicek study reaches DC1-B and DC-2	Industrial and remnant narrow riparian corridor. <sup>2</sup> Wastewater treatment plant. <sup>5</sup>		None noted.	Extremely degraded <sup>2</sup>	None noted.	Adjacent to the RWWTP, the habitat is mostly flatwater with a few pools (3rd class). <sup>5</sup> There is a single 1st class pool at the RWWTP outfall. This area was given an overall quality value of 1, or poor.  From the upstream end of the RWWTP to the UPRR tracks, the habitat is similar, mostly flatwater, but with a few pools (2nd and 3rd class) and riffles. One additional deep holding pool was present at the base of UPRR cascade. This area was given an overall quality value of 2, or fair to poor quality.
17	Vernon Street to Riverside Ave.	Bishop's Reach 6 and roughly Vanicek's DC-3.	Industrial <sup>2</sup>		None noted.	Mixed remnant riparian. Species listed as being present include mature valley oaks, and many non-natives. <sup>2</sup>	None noted.	Mostly flatwater, with very few riffles and a few 2nd and 3rd class pools. There is one 1st class pool at the Cirby Creek/Dry Creek confluence. The reach had poor cover, the majority of which was provided by overhanging vegetation. The disturbed streambed under UPRR (4 culverts) and Foothill Blvd. underpasses result in the absence of streamside cover. The reach was given an overall quality of 1, or poor.
18	Riverside Ave. to Darling Way	Bishop's Reach 7 and roughly Vanicek's DC-4.	Industrial, residential, and open space. <sup>2</sup>			Remnant riparian, landscaping, and ruderal vegetation. <sup>2</sup>  Adjacent to the creek the vegetation type is Valley oak series with a Willow species association (DCV1). Dominant species were Valley oak ( <i>Quercus lobata</i> ), willow species ( <i>Salix</i> spp.), tree of heaven ( <i>Ailanthus altissima</i> ), and Himalayan blackberry ( <i>Rubus discolor</i> ). Several other non-native species are also present: giant reed ( <i>Arundo donax</i> ), eucalyptus ( <i>Eucalyptus</i> spp.), and pampas grass ( <i>Cortaderia jubata</i> ). <sup>3</sup>	Cirby Creek joins Dry Creek in this reach.	This reach was assessed as nearly all flatwater with a few 3rd class pools. The pipe at the Cirby Creek/Dry Creek confluence is a barrier at low flows (This is currently being modified – see Mitigation/Restoration, below). The overall quality of the Reach is 1, or poor. <sup>5</sup>
19	Darling Way to Douglas Blvd.	Bishop's Reach 8 and Vanicek's DC-5.	Developed park (historically a land fill), open space, and urban (residential).			Landscaping and remnant mixed riparian, with native and non-native species. The small tributary that runs through the park had excellent riparian habitat. <sup>2</sup>  Several different habitat types adjacent to the creek in this reach include: Valley oak series with an Oregon ash association (DCV2), Valley oak series with a Fremont Cottonwood association (DCV6), and Valley oak series with a White alder association (DCV7). Along the tributary east of Saugstad the vegetation types were: Interior live oak series (DC3), Fremont cottonwood series with a Valley oak association (DCV4), and a Blue oak series with a Himalayan blackberry alliance (DCV5). Notable non-native species in this reach are: tree of heaven ( <i>Ailanthus altissima</i> ), Himalayan blackberry ( <i>Rubus discolor</i> ), giant reed ( <i>Arundo donax</i> ), Indian bean tree (catalpa) ( <i>Catalpa bignonioides</i> ), and scarlet wisteria ( <i>Sesbania punicea</i> ). <sup>3</sup>	A small unnamed tributary	There is more habitat diversity here than downstream; flatwater still predominates, but several pools (one 1st class and several 2nd and 3rd class) and riffles are present. <sup>5</sup> Cover for fish is fair, provided by pools, logs, and overhanging vegetation, with a significant canopy cover.  At low flow, there were two possible barriers: the low dam in middle of reach and the cascade at Douglas Bridge. The reach has an over all quality ranking of 3, or fair.
20	Douglas Blvd. to Folsom Road	Bishop's Reach 9 and to Vanicek's DC-6.	Urban and industrial. <sup>2</sup>			Remnant riparian, weedy and landscape species. <sup>2</sup>  Adjacent to the creek the vegetation type is White alder series with a mixed non-native species association ( <u>DCV8</u> ). Dominant species were white alder ( <i>Alnus rhombifolia</i> ), Valley oak ( <i>Quercus lobata</i> ), tree of heaven ( <i>Ailanthus altissima</i> ), and Oregon ash ( <i>Fraxinus latifolia</i> ). Himalayan blackberry ( <i>Rubus discolor</i> ), giant reed ( <i>Arundo donax</i> ), and <i>Pyracantha</i> spp. were also present. <sup>3</sup>	None noted.	Some habitat diversity, but much of this reach is channelized. One large pool (2nd class) occupied by domestic waterfowl (Royer Park), presents a potential organic pollution problem. An additional few riffles and pools (2nd and 3rd class) are also present. Cover is fair, and the reach received an overall quality value of 2. <sup>5</sup>

Table 3.7a. Reach by Reach Tributary Descriptions, Land Use, Cultural Resources, and Biological Resources

Reach Number	Reach Name	Corresponding Reaches	Adjacent Land Use	Future Land Use	Cultural Resources	Vegetation and Wildlife Habitat Elements	Adjacent Wetlands/Tributaries	Fisheries Habitat Elements
21	Folsom Road to confluence with Miners Ravine and Antelope Creek	Bishop's Reach 10 and Vanicek's DC-7.	Riparian corridor; urbanized; homeless comps; open space. <sup>2</sup>		Evidence of mining (tailing piles) on the west side of the creek.	Mix of native, weedy and landscaped species; wider corridor behind Adelante High School; nice open space downstream of Harding Boulevard, becomes thick riparian habitat <sup>2</sup>  ECORP assessed several different habitat types adjacent to the creek in this reach: Willow species series (DCV12), Live oak series with an Oregon ash association (DCV10), and Willow species series with a Fremont cottonwood association. One other type Fremont cottonwood-Willow-Oak series with an Oregon ash association was associated with an area that appeared to have been mined and there was an equal mix of these species in that area. Several elderberry shrubs were located in the area closest to the park. <sup>3</sup>	One unnamed (short due to development) tributary.	Fair habitat diversity. <sup>5</sup> Flatwater still predominates, but numerous riffles and pools (all three classes) are present. Pools, instream structures, and overhanging vegetation provided fair to good cover. The overall quality ranking for this Reach was 3, or fair.  Two possible barriers to passage at low flow: a rock dam at Lincoln Estates Park and persistent beaver dam just below Antelope Creek.
<b>Cirby Creek by Reach</b>								
1	Confluence with Dry Creek to Highway 80	Bishop's (1997) reach 1.	Urban with a riparian corridor in open space. <sup>2</sup>		None noted.	In this reach, there are pockets of nice riparian vegetation including <i>Carex barbarae</i> ; but, the reach is dominated by ornamental/invasives such as Himalayan blackberry ( <i>Rubus discolor</i> ) and German ivy ( <i>Senecio mikanioides</i> ). <sup>2</sup>	None noted.	Cirby Creek is generally not considered habitat for anadromous salmonids; however, the occasional fish may migrate through and attempt to spawn.
2	Highway 80 to Sunrise Ave.	Bishop's (1997) reach 2.	Urbanized <sup>2</sup>		None noted.	Variable width riparian corridor consisting of a mixed weedy understory, including Himalayan blackberry ( <i>Rubus discolor</i> ) and periwinkle ( <i>Vinca spp.</i> ), which are dominant on the left bank. Some native seedlings are scattered in this reach. <sup>2</sup>	The confluence of Linda Creek with Cirby Creek occurs in this reach.	Cirby Creek is generally not considered habitat for anadromous salmonids; however, the occasional fish may migrate through and attempt to spawn.
3	Sunrise Ave. to Oak Ridge Drive	Bishops (1997) reaches 3 and 4.	Urbanized and heavily urbanized <sup>2</sup> .			The upstream area has a mixed riparian vegetation community, while the downstream portions are described as sparse riparian and weedy <sup>7</sup> .		Cirby Creek is generally not considered habitat for anadromous salmonids; however, the occasional fish may migrate through and attempt to spawn.
4	Oak Ridge Drive to End							
<b>Linda Creek by Reach</b>								
1	Confluence with Cirby Creek to Oak Ridge Drive	Bishop's (1997) Reach 1.	Urbanized <sup>2</sup>		None noted.	Narrow riparian corridor with exotic landscape and weedy species, including false bamboo ( <i>Polygonum cuspidatum</i> ) and German ivy ( <i>Senecio mikanioides</i> ). <sup>2</sup> . Habitat degradation due to clearing of vegetation and rocking of banks. <sup>2</sup>	None noted.	No reach-specific discussion is available. GANDA (1998) did collect habitat data for this reach including habitat type, length, depth, dominant substrate, instream cover, and canopy cover.
2	Oak Ridge Drive to Rocky Ridge Drive	Bishop's (1997) reaches 2 and 3.	Urban in the downstream portion with some open space in the upstream portion. <sup>2</sup>		None noted.	Mixed riparian community, with a canopy level described as "fair." Exotic landscape species, including German ivy ( <i>Senecio mikanioides</i> ) and bamboo (species unidentified) dominate the understory in some places. Oak trees, wetlands, and flood retention areas are reported in the upstream portion of this reach. Good potential for riparian enhancement is noted <sup>4</sup> .	None noted.	No reach-specific discussion is available. GANDA (1998) did collect habitat data for this reach including habitat type, length, depth, dominant substrate, instream cover, and canopy cover.
3	Rocky Ridge Drive to Champion Oaks Driv	Bishop's (1997) reach 4.	Urban and open space <sup>2</sup> .		None noted.	The vegetation community in this reach consists of remnant riparian with ruderal and exotic landscape species, such as pampas grass ( <i>Cortaderia selloana</i> ). <sup>2</sup> .	Strap Ravine	No reach-specific discussion is available. GANDA (1998) did collect habitat data for this reach including habitat type, length, depth, dominant substrate, instream cover, and canopy cover.
4	Champion Oaks Drive to Old Auburn Road	Bishop's (1997) reaches 5 and 6.	Urban and open space, with a riparian corridor <sup>2</sup> .		None noted.	The riparian community in the downstream portion includes an oak overstory, with a weedy understory, including exotic landscape species, such as Himalayan blackberry <i>Rubus discolor</i> ) and pampas grass ( <i>Cortaderia selloana</i> ). At places, there is sparse vegetative bank cover. Further upstream, the community is dominated by older oaks <sup>2</sup> .	None noted.	No reach-specific discussion is available. GANDA (1998) did collect habitat data for this reach including habitat type, length, depth, dominant substrate, instream cover, and canopy cover.
5	Old Auburn Road to Indian Hill Creek Drive	Bishop's (1997) reach 7, which terminates at the Sacramento-Placer County line.	Urban, with a riparian corridor in the open space <sup>2</sup> .		Not assessed.	The vegetation community is described as a mixed riparian oak assemblage, with a lower percentage of exotic invasive species than downstream reaches <sup>2</sup> .	One unnamed tributary.	No reach specific discussion is available.

Table 3.7a. Reach by Reach Tributary Descriptions, Land Use, Cultural Resources, and Biological Resources

Reach Number	Reach Name	Corresponding Reaches	Adjacent Land Use	Future Land Use	Cultural Resources	Vegetation and Wildlife Habitat Elements	Adjacent Wetlands/Tributaries	Fisheries Habitat Elements
6	Indian Hill Creek Drive to Hazel Ave. (Sierra College Blvd.)							No suitable gravel for spawning and very little cover <sup>7</sup> .
7	Hazel Ave. to Granite Ave.						One unnamed tributary.	
8	Granite Ave. to Wedgewood Drive		Low density residential, rural residential and open space (half of this reach passes through the Indian Stone Coral park/reserve area).		Bedrock mortars and a rock dam.	Adjacent vegetation is (Holland types) blue oak woodland, Great Valley mixed riparian forest, Great Valley willow scrub and non-native annual grassland. There are several good stands of purple needlegrass ( <i>Nassella pulchra</i> ) adjacent to the creek in the oak woodland areas.	There is at least one large unnamed tributaries and two smaller tributaries.	Large trees and shrubs may be rooted within the creek bed or on the immediate edge, but because the flows during the wet season are relatively fast, there is little to no herbaceous vegetation growth within the creek channel <sup>8</sup> . The Left Fork of Linda Creek upstream of Cherry Rd. has some moderately deep run-and-pool habitats with undercut banks that provide suitable rearing areas <sup>8</sup> . The upstream end of the reach is a high gradient riffle with clean gravel and cobble that would provide good spawning substrate for salmonids. Water clarity in this reach is poor. Generally, the visibility was less than 30 cm <sup>7</sup> .
9	Wedgewood Drive to Granite Bay Golf Club Pond							Some moderately-deep run-pool habitat with undercut banks provides good rearing habitat. Further upstream, higher gradient riffles with clean gravel and cobble would provide good spawning habitat. <sup>7</sup>
10	Granite Bay Golf Club Pond to End		Granite Bay Golf Course <sup>7</sup>					Substrate is not suitable for salmonid spawning <sup>7</sup> and the reach is marginal for salmonid rearing. Portions may have been historically accessible but dams on the created within the golf course are barriers to passage.
<b>Strap Ravine by Reach</b>								
1	Confluence with Linda Creek to McLaren Drive	Bishop's (1997) reach 1.	Open space and urban low density residential <sup>2</sup> .			Mixed riparian with Valley oak ( <i>Quercus lobata</i> ) seedlings, with ornamental species, and non-native grassland with ruderal vegetation, (which showed evidence of being mowed at the time of Bishop's survey (1997)). <sup>2</sup>	None noted.	No specific studies have been conducted.
2	McLaren Drive to Eureka Road	Bishop's (1997) reach 2.	Maidu Park (open space use) is adjacent to the creek in this reach <sup>2</sup> . The Maidu Interpretive Center is a small museum located at the site.		This reach passes a Maidu village site. This site is protected, but is open to the public for tours. The site has hundreds of bedrock mortar holes and several petoglyphs.	Riparian habitat, oak woodlands, and wetlands. Grasslands are ruderal, and overall community quality is poor <sup>2</sup> .	wetlands	No specific studies have been conducted.
3	Eureka Road to East Roseville Parkway	Bishop's (1997) reach 3.	Open space and urbanized <sup>2</sup> .		None noted.	A relatively thick riparian corridor, consisting of a mixture of native species, exotic invasive, and landscape species. There is well-developed overstory and understory cover <sup>2</sup> . The small pond (see Adjacent Wetlands/Tributaries, below) is completely covered with water hyacinth <i>Eichornia crassipes</i> ).	A significant amount of flow is diverted downstream of the bridge to a small pond <sup>1</sup> .	No specific studies have been conducted.
4	East Roseville Parkway to Sierra College Blvd.	Bishop's (1997) reach 4.	Open space along the creek with adjacent urban development <sup>2</sup> .		None noted.	A relatively thick riparian corridor with a mixture of native species and exotic invasive and landscape species. There is well developed tree and understory cover <sup>2</sup> .	None noted.	No specific studies have been conducted.

Table 3.7a. Reach by Reach Tributary Descriptions, Land Use, Cultural Resources, and Biological Resources

Reach Number	Reach Name	Corresponding Reaches	Adjacent Land Use	Future Land Use	Cultural Resources	Vegetation and Wildlife Habitat Elements	Adjacent Wetlands/Tributaries	Fisheries Habitat Elements
5	Sierra College Blvd. to near Seeno Ave.	Bishop's (1997) reach 5 (i.e., "Sierra College Boulevard to near Douglas Boulevard").	Rural residential with open space associated with the creek <sup>2</sup> .	Unknown, possibly commercial/residential.	None noted	Riparian habitat, a large wetland, and oak woodlands. There is a healthy assemblage of native species <sup>2</sup> .	Large wetland.	No specific studies have been conducted.
6	Seeno Ave. to near Berg Street	Bishop's (1997) reach 6 (i.e., "near Douglas Boulevard to downstream point of gravel lakes").	Open space; rural residential, commercial, and gravel mines-lakes <sup>2</sup> .	Unknown, possibly increased commercial/residential.	None noted.	Riparian habitat, associated wetland, and oak woodlands. There is a good assemblage of native species <sup>2</sup> .	Wetland	No specific studies have been conducted.
7	Berg Street to Barton Road	Bishop's (1997) reach 7 (i.e., "upstream point of gravel lakes to Barton Road").	Open space, commercial, and mining <sup>2</sup> .	Unknown, possibly increased commercial/residential.	None noted.	Riparian corridor, open water, and oak woodlands. Vegetation is "ruderal" with many non-native species, including Himalayan blackberry ( <i>Rubus discolor</i> ) and pampas grass ( <i>Cortaderia selloana</i> ) <sup>2</sup> .	None noted.	No specific studies have been conducted.
<b>Antelope Creek by Reach</b>								
1	Confluence with Dry Creek and Miners Ravine to Atlantic Street	Bishop's Reach 1 and Vanicek's AC-1.	Urban development beyond the riparian corridor .			Good riparian vegetation adjacent to the creek, however the upland areas are weedy.	None were noted.	Two potential spawning sites; mostly flatwater with a few pools, one capable of providing a low velocity resting area for several adult Chinook salmon. This pool occurs at the sharp bend in the stream just downstream from the Harding bridge. Overall, this reach was rated 2, or fair to poor quality <sup>5</sup> .  A man-made rock dam toward the lower reach of Antelope Creek would be a barrier fish passage, at least during low flows. However, according to the California Department of Fish and Game, in the past, salmon have spawned in the lower reaches of Antelope Creek <sup>5</sup> .
2	Atlantic Street to Antelope Creek Drive	Bishop's Reaches 2 and 3 and Vanicek's AC-2.	Open space, industrial, landfill, railroad right of way, power line right of way, and archery range <sup>2</sup> .			Ggrassland, wetland, oak woodland, and ruderal vegetation. Interior live oaks and Valley oaks were regenerating in this reach and that there was a high percentage of native species in the riparian corridor. <sup>2</sup> Wetland genera were Carex and Juncus. <sup>2</sup>		This reach habitat was rated 2 (fair to poor quality) <sup>5</sup> . This was the same designation given to Reach 1; however, no suitable spawning sites were identified at this site. This reach does have some cover for fish including low overhanging vegetation, undercut bank, logs, and canopy. Several potential barriers at low flow were also noted <sup>6</sup> .
3	Antelope Creek Drive to Highway 65	Approximately Bishop's Reach 4.	Open space and urban.			Oak woodland, native and non-native grassland, and wetland in this reach. A high percentage of the vegetation is native, including oak species, which are regenerating <sup>2</sup> .	See the discussion of mitigation.	No specific studies have been conducted.
4	Highway 65 to Sunset Blvd.	Bishop's Reach 5.	Narrow riparian corridor through which the creek flows (open space) and urban.			Remnant riparian vegetation with ruderal and ornamental vegetation making up the remainder <sup>2</sup> .	None.	No specific studies have been conducted.
5	Sunset Blvd. to Grove Street (Yankee Hill Road)	Bishop's Reach 6.	Open space and urban (including low density residential and golf course).			Oak woodland, riparian, native and non-native grassland, ornamental and ruderal <sup>2</sup> .	The confluence of Antelope Creek with Clover Creek, Antelope Creek's major tributary, falls within this	No specific studies have been conducted.
6	Grove Street (Yankee Hill Road) to Del Mar Ave.	Bishop's Reach 7.	Open space, rural residential, and industrial.	There is potential for low-density residential.		Oak woodland and significant Himalayan blackberry area <sup>2</sup> .	Aitken Reservoir, an instream reservoir, is just upstream of Grove Street (Yankee Hill Road). Wetlands are also present. <sup>2</sup>	No specific studies have been conducted.



Table 3.7a. Reach by Reach Tributary Descriptions, Land Use, Cultural Resources, and Biological Resources

Reach Number	Reach Name	Corresponding Reaches	Adjacent Land Use	Future Land Use	Cultural Resources	Vegetation and Wildlife Habitat Elements	Adjacent Wetlands/Tributaries	Fisheries Habitat Elements
7	Del Mar Ave. to Sierra College Blvd.	Bishop's Reach 8.	Open space and rural residential, with potential for low-density residential			Grassland and riparian scrub, dominated by Himalayan blackberry are the major vegetation types. The blackberry may be inhibiting native seedling germination <sup>2</sup> .	None were noted.	No specific studies have been conducted.
8	Sierra College Blvd. to King Road	Bishop's Reach 9.	Rural residential and undeveloped open			Mixed oak woodland with a Himalayan blackberry understory <sup>2</sup> .	None were noted.	No specific studies have been conducted.
9	King Road to Citrus Colony Road	Bishop's Reach 8.	Rural residential and undeveloped open			Riparian forest with dominant Himalayan blackberry and horse pasture <sup>2</sup> .	One unnamed tributary.	No specific studies have been conducted.
10	Citrus Colony Road to End							
Clover Valley Creek by Reach								
1	Confluence with Antelope Creek to Midas Avenue		Golf cours, public park, residential			Landscape	None identified.	A significant barrier to fish passage exists at Argonaut Drive; the culvert is about 2 feet above the streambed on the downstream side and during higher flows the small culvert size (1.52 feet tall x 3 feet wide) would result in 'jet' type flows, preventing upstream
2	Midas Avenue to Creekwood Drive		residential and golf course			The channel downstream of the golf course is narrow and heavily vegetated with willows, Himalayan blackberry and other encroaching vegetation. The eastern outflow channel is wide and shallow with little encroaching riparian vegetation.	No provision for fish passage to above the impounded areas	
3	Creekwood Drive to Rawhide Road		Low density residential					
4	Rawhide Road to Creekside Lane (end)			Proposed Clover Valley Ranch Residential subdivision.		Vegetation has been described by Acorn Environmental Consulting (1991) and more recently by Davis <sup>2</sup> (No Date). Four distinct vegetative communities are in this reach. <u>Riparian community</u> , <b>Canopy</b> closest to the creek consists of Valley oak ( <i>Quercus lobata</i> ), willows ( <i>Salix gooddingii</i> , <i>S. exigua</i> , <i>S. laevigata</i> , and <i>S. lasiolepis</i> ), white alder ( <i>Alnus rhombifolia</i> ), Fremont cottonwood ( <i>Populus fremontii</i> ), walnut ( <i>Juglans nigra</i> ), wild grape ( <i>Vitis californica</i> ), and blackberry ( <i>Rubus spp.</i> ) (Davis <sup>2</sup> No Date). <b>Seasonally flooded herbaceous layer</b> : Juncus sp., smartweed ( <i>Polygonum punctatum</i> ), and spikerush ( <i>Eleocharis montevidensis</i> ), as well as exotic species such as Bermuda grass ( <i>Cynodon dactylon</i> ), dallisgrass ( <i>Paspalum dilatatum</i> ), and strawberry clover ( <i>Trifolium fragiferum</i> ) <sup>7</sup> . <u>Two distinct types of annual grasslands</u> (both disturbed by grazing and dominated by exotic grasses). Wild oats ( <i>Avena sp.</i> ) dominate the ridgetop grasslands where soils are thin, while a broader assemblage of ripgut brome ( <i>Bromus diandrus</i> ), soft chess ( <i>Bromus mollis</i> ), filaree ( <i>Erodium spp.</i> ), and yellow star-thistle ( <i>Centaurea solstitialis</i> ) occupy the deeper soils lower in the valley <sup>7</sup> . <u>Foothill woodland community</u> , <b>Canopy</b> exhibiting an estimated 60% closure and dominated by Interior live oak ( <i>Quercus wislizenii</i> ), with blue oak ( <i>Q. douglasii</i> ) and grey pine ( <i>Pinus sabiniana</i> ) associates present <sup>7</sup> . <b>Understory species include</b> California buckeye ( <i>Aesculus californicus</i> ), Toyon ( <i>Heteromeles arbutifolia</i> ), and poison oak ( <i>Toxicodendron diversilobum</i> ) <sup>7</sup> . <u>Blue oak (<i>Q. douglasii</i>) dominated woodland</u> , <b>Canopy</b> closure estimated at 30%-60% on the "steeper back slope of the volcanic ridges" <sup>7</sup> ." Slightly higher up the ridges and adjacent to the ridgetop grasslands, this community thins to an oak savannah with canopy closure estimated at 10%-30% <sup>7</sup> .		
Miners Ravine by Reach								

Table 3.7a. Reach by Reach Tributary Descriptions, Land Use, Cultural Resources, and Biological Resources

Reach Number	Reach Name	Corresponding Reaches	Adjacent Land Use	Future Land Use	Cultural Resources	Vegetation and Wildlife Habitat Elements	Adjacent Wetlands/Tributaries	Fisheries Habitat Elements
1	Confluence with Dry Creek and Antelope Creek to the Confluence with Secret Ravine	Bishop's Reach 11 (Dry Creek). "Lower Miners Ravine" <sup>6</sup>	Urban, industrial, and open space. <sup>2</sup> Sculpture Park is adajenct to the creek between the I-80 bridge and Eureka Rd. bridge <sup>3</sup> .	Construction was ongoing during the assessment <sup>3</sup> and there were areas proposed for development, but not yet built out.		<p>Riparian, non-native grassland, and herbaceous species. The portion of the creek between Harding Blvd. and the Interstate 80 bridge is not heavily vegetated; but upstream of the I-80 bridge, alders increase in number and provide more canopy cover<sup>2</sup></p> <p>Immediately adjacent to the creek, the vegetation is a White Alder – Willow Species series (MRV3)<sup>3</sup>: White alder (<i>Alnus rhombifolia</i>) and willow species (<i>Salix spp.</i>) were dominant with Oregon ash (<i>Fraxinus latifolia</i>), coyote brush (<i>Baccharis pilularis</i>), California buckeye (<i>Aesculus californica</i>), Himalayan blackberry (<i>Rubus discolor</i>), and blue elderberry (<i>Sambucus mexicana</i>) also present.</p> <p>Between the Interstate 80 bridge and the Eureka Road bridge vegetation in Sculpture Park is a Blue oak series with an Interior live oak association (MRV1).<sup>3</sup> Species recorded for this area included blue oak (<i>Quercus douglasii</i>), interior live oak (<i>Quercus wislizenii</i>), coyote brush (<i>Baccharis pilularis</i>) and several, presumably non-native, grass species (at the time the grasses were only seedlings).</p> <p>The vegetation associated with the one tributary flowing into this reach was a Willow Species series with a Himalayan Blackberry association (MCV3). Dominant species were willow species (<i>Salix spp.</i>) and Himalayan blackberry (<i>Rubus discolor</i>). Cattails (<i>Typha spp.</i>) were also present. Standing dead trees, fallen tree limbs and trunks, rocks and boulders were also present during the assessment<sup>2</sup>. Additionally, several elderberries, potential habitat for the Valley elderberry longhorn beetle, were adjacent to the creek.</p>	One tributary (shortened by development) enters this reach just upstream of the Eureka/Taylor Road exit. Flow in this tributary comes from a very large outfall that appears to carry runoff from the Sam's Club/Home Depot/etc. parking lot.	Suitable conditions for salmon spawning exist at one site located just downstream of the confluence of Secret Ravine with Miners Ravine <sup>5</sup> . There is also adequate habitat for juvenile salmon (pools and instream cover were present). This reach had good habitat diversity, with runs common, but with riffles and pools representing around 40% of the reach and at least one pool capable of providing a "low velocity resting area for several adult Chinook salmon". <sup>5</sup> Pools, instream structures, and overhanging vegetation provide cover. The identified barriers during periods of low flow were the shallow riffle under the I-80 bridge and the presence of beaver dams. This reach's habitat was rated 4, or good quality <sup>5</sup> .
2	Confluence with Secret Ravine to Sierra College Blvd.	Bishop's Reach 1 and a portion of what Vanicek termed "Upper Miners Ravine", which covered the area from the Secret Ravine confluence almost to Sierra College Blvd.	Open space, former wastewater ponds (now converting to either wetland or upland habitat as they are not in use), and urban (mostly low-density and high density residential). Much of the adjacent land is currently under development or has been recently developed. A bike trail in the open space corridor crosses the creek several times.		Portions of Miners Ravine were noted to have evidence of mining activities and several streamside boulders have bedrock mortar holes. <sup>3</sup>	<p>Grassland, oak woodland, riparian forest scrub, adjacent wetland/vernal pool complexes. There is a high native plant density and diversity, although there was one large Himalayan blackberry stand present.<sup>2</sup> Live oak series with a Blue oak/brome association (MRV4), Willow species series with a buttonwillow-Himalayan blackberry association (MRV5), Willow-Live oak series with a Himalayan blackberry-grass association (MRV6), Willow-Live oak series with a grass association (MRV7), Blue oak series with a live oak/grass association (MRV8), White alder-Willow species association with a Himalayan blackberry association are the major communities present.<sup>3</sup></p> <p>Notable non-native species present are: yellow star-thistle <i>Centaurea solstitialis</i>), pampas grass (<i>Cortaderia jubata</i>), and scarlet wisteria (<i>Sesbania punicea</i>). Although these species are present, they are not yet present in significant numbers<sup>3</sup>.</p> <p>Standing dead trees, fallen tree limbs and trunks were noted and rocks and boulders were also present.<sup>3</sup></p>	Wetlands and a tributary, False Ravine, which has its confluence with Miners Ravine in this reach. Former waterwater treatment ponds are also adjacent.	<p>This portion of the creek has pools and riffles with substrate consisting of small boulders and rubble. A large component of overhanging vegetation was present. Six locations had "satisfactory", but marginal, spawning conditions, as well as adequate juvenile Chinook salmon habitat. Four of these were between the confluence with Secret Ravine and the Sunrise Blvd. bridge, and the other two were between the Sunrise Blvd. bridge and the second bike trail crossing<sup>5</sup>.</p> <p>Many beaver dams were present, resulting in the larger pools. The beaver dams were potential barriers to passage as were rubble bars and debris dams. At the time of the survey, 10 beaver dams were in this reach, and were likely a constraint to resident fish populations during low flow<sup>5</sup>. The six bike trail bridges in place at the time were assessed for their potential effect on fish passage and did not appear to be impacting fish passage upstream of the bridge<sup>5</sup>.</p>
3	Sierra College Blvd. to Ashby Lane	Bishop's Reach 2.	Open space, residential (some of the homes are noted as being in the floodway). <sup>2</sup>		None were noted.	Thickly vegetated riparian with a native riparian oak woodland overstory and understory (including seedlings). There are also lawns, landscaping and several problematic non-native plant species present: Himalayan blackberry, German ivy, and pampas grass. <sup>2</sup>	None were noted.	DWR conducted a survey in 2002 and located the potential barriers to fish passage. A figure showing their locations is in the Fisheries section.
4	Ashby Lane to Barton Road	Bishop's Reach 2.	Open space with some rural residential. <sup>2</sup>		None noted.	Mature riparian forest with a mixture of age classes. There is a good diversity of upland and riparian understory. However, in at least one area, a homeowner had been clearing riparian vegetation and some areas have blackberry. Snags (potential wildlife habitat) are also present <sup>2</sup> .	Homeowners have off-stream ponds in offstream locations. <sup>2</sup>	DWR conducted a survey in 2002 and located the potential barriers to fish passage. A figure showing their locations is in the Fisheries section.

Table 3.7a. Reach by Reach Tributary Descriptions, Land Use, Cultural Resources, and Biological Resources

Reach Number	Reach Name	Corresponding Reaches	Adjacent Land Use	Future Land Use	Cultural Resources	Vegetation and Wildlife Habitat Elements	Adjacent Wetlands/Tributaries	Fisheries Habitat Elements
5	Barton Road to Tall Pine Lane	Bishop's Reach 4.	Rural residential, noted as being set back from the floodplain. <sup>2</sup>		None noted.	Bishop describes the adjacent vegetation as "fair". Native species mentioned include live oak and gray pine. Non-native species include: Himalayan blackberry, pampas grass, eucalyptus, and bamboo. Some areas did not have an understory and some had only sparse seedlings. Some homeowners have cleared the vegetation and replaced it with lawn. Other areas were impenetrable Himalayan blackberry <sup>2</sup> .	None were noted.	DWR conducted a survey in 2002 and located the potential barriers to fish passage. A figure showing their locations is in the Fisheries section.
6	Tall Pine Lane to Carolinda Drive	Bishop's Reach 5.	Rural residential and open space. <sup>2</sup>		None noted.	Oak/gray pine woodland with mixed understory. The banks were mostly lined with Himalayan blackberry and the hillsides had outstanding rock outcrops.	None were noted.	DWR conducted a survey in 2002 and located the potential barriers to fish passage. A figure showing their locations is in the Fisheries section.
7	Carolinda Drive to Itchy Acres Road	Bishop's Reach 6.	Residential, open space, and remnant riparian corridor. <sup>2</sup>		None noted.	Mixed riparian with a nice <b>overstory</b> , mature coast redwoods, remnant riparian; <b>understory</b> open to thick himalyan blackberry cover to landscaping vegetation, pampas grass, lawns; <b>understory</b> , weak. <sup>2</sup>	One tributary comes in on the left bank and there are developed ponds.	DWR conducted a survey in 2002 and located the potential barriers to fish passage. A figure showing their locations is in the Fisheries section.
8	Itchy Acres Road to Miners Ravine Road	Bishop's Reach 7.	Urban with a remnant riparian corridor. <sup>2</sup>		None noted.	Some areas of bank are bare of vegetation. Little riparian vegetation, mostly non-native species including German ivy, periwinkle, and Himalayan blackberry <sup>2</sup> .	None were noted.	DWR conducted a survey in 2002 and located the potential barriers to fish passage. A figure showing their locations is in the Fisheries section.
9	Miners Ravine Road to Leibinger Lane	Bishop's Reach 8.	Urban surrounding the remnant riparian corridor. <sup>2</sup>		None noted.	Alders, willows, one buckeye, and some wetland species including <i>Carex</i> . Ornamental species and other non-natives included blackberry, periwinkle, coast redwood, oleander, etc <sup>2</sup> .	None were noted.	DWR conducted a survey in 2002 and located the potential barriers to fish passage. A figure showing their locations is in the Fisheries section.
10	Leibinger Lane to (1 <sup>st</sup> upstream crossing) Auburn-Folsom Road	Bishop's Reach 9.	Open space, Miners Ravine Nature Reserve (Reserve), and low-density residential <sup>2</sup> The southeastern bank is primarily in the Reserve, the northwestern bank is adjacent to the Shelborne development.		There are cultural resources in the vicinity, including bedrock mortars.	Vegetation at the Reserve has several plant communities including: gray pine-oak woodland, cottonwood-willow riparian forest, vegetated sandbars, ruderal vegetation, and ornamental vegetation. Adjacent to the housing development there is a predominance of non-native vegetation such as periwinkle. During the implementation of the Miners Ravine restoration project, some of the non-native vegetation was removed (EDAW 2002a, 2002b). See the Mitigation/Restoration Section, below.	None were noted.	There is a concrete sill protecting an active waterline that crosses the creek in the Reserve. This may be a barrier to passage at low flows. Currently, there are plans to pursue a fish passage project for this waterline. See figure in Fisheries section for a map of DWR surveyed barriers to fish passage.
11	1 <sup>st</sup> Upstream Crossing of Auburn Folsom Road to 2 <sup>nd</sup> Upstream Crossing of Auburn Folsom Road	Bishop's Reach 10.	Mostly open space with low density residential and rural residential. <sup>2</sup>	Potential for residential development.	None were noted.	The best habitat occurs in the middle section where there are no adjacent impacts from residences. This reach has rolling hills, diverse topography and vegetation. There are some areas where Himalayan blackberry is dominant and a few pampas grass stands and other ornamental species, such as German ivy, were adjacent to homes. Where native vegetation was dominant, a diverse understory with seedling regeneration was noted <sup>2</sup> . Vegetation around the lake is mostly grass and of low habitat value <sup>2</sup> .	Abundant wetlands and stock ponds. <sup>2</sup>	Cottonwood dam (and associated lake) is a barrier to fish passage. <sup>2</sup>
12	2 <sup>nd</sup> Upstream Crossing of Auburn Folsom Road to the Vicinity of Oakview Drive	Bishop's Reach 11.	Rural residential, open space, and roadway (reach is adjacent to Auburn-Folsom Road). <sup>2</sup>	Potential for increased residential development.	None noted.	Mostly Himalayan blackberry with remnant oak overstory and one large stand of false bamboo <sup>2</sup> . Left bank adjacent to homes had been cleared. <sup>2</sup>	Some adjacent ponds allowed to function in a natural way; filling from natural run-off and slowly draining.	See figure in Fisheries section for a map of DWR surveyed barriers to fish passage.
13	Vicinity of Oak View Drive to Moss Lane	Bishop's Reach 12.	Open space and estate residential.	Potential for increased residential development.	None noted.	A good overstory of oaks, gray pine and willows. The understory was mixed with heavy Himalayan blackberry in places, significant pampas grass bunches within riparian area and periwinkle dominant in locations. Landscaping adjacent to homes becomes very manicured in this reach, all the way to the creek. <sup>2</sup>	Some backwater wetland areas and numerous landowner lakes. <sup>2</sup>	See figure in Fisheries section for a map of DWR surveyed barriers to fish passage.
14	Moss Lane to Willow Valley Place	Bishop's Reach 13.	Open space and rural residential. <sup>2</sup>	Potential for further residential development.	None noted.	Himalayan blackberry is dominate adjacent to creek, whereas the upland areas were had an excellent understory and overstory of native species. <sup>2</sup>	None were noted.	See figure in Fisheries section for a map of DWR surveyed barriers to fish passage.

Table 3.7a. Reach by Reach Tributary Descriptions, Land Use, Cultural Resources, and Biological Resources

Reach Number	Reach Name	Corresponding Reaches	Adjacent Land Use	Future Land Use	Cultural Resources	Vegetation and Wildlife Habitat Elements	Adjacent Wetlands/Tributaries	Fisheries Habitat Elements
15	Willow Valley Place to Dick Cook Road	Bishop's Reach 14.	Open space and rural residential. <sup>2</sup>	Potential for an increase in residential	None noted.	A native overstory of oaks and gray pine in this reach, with an understory completely dominated by Himalayan blackberry <sup>2</sup> .	None were noted.	See figure in Fisheries section for a map of DWR surveyed barriers to fish passage.
16	Dick Cook Road to 3 <sup>rd</sup> Upstream Crossing of Auburn Folsom Road	Bishop's Reach 15.	Narrow riparian corridor with surrounding parking lot, mobile home park, and sewage treatment plant. <sup>2</sup>		None noted.	Valley oak and cottonwoods dominate the overstory with a mixture of wetland and riparian understory. Abundant seedlings were present, Himalayan blackberry, and an area with large cottonwoods and cleared understory was noted.	None were noted.	See figure in Fisheries section for a map of DWR surveyed barriers to fish passage.
17	3 <sup>rd</sup> Upstream Crossing of Auburn Folsom Road to Lomida Lane	Bishop's Reach 16.	Open space and residential. <sup>2</sup>	Potential for an increase in residential development.	None noted.	A heavy growth of Himalayan blackberry lines the creek. In addition, medium aged alders, mature cottonwoods, willows, adjacent oak woodland hillside with a mostly weedy understory were also present <sup>2</sup> .	None were noted.	See figure in Fisheries section for a map of DWR surveyed barriers to fish passage.
18	Lomida Lane to Horseshoe Bar Road	Bishop's Reach 17.	A large wetland basin as open space. <sup>2</sup>		None noted.	Thickly vegetated with <i>Typha</i> , willow, oaks and cottonwoods on the perimeter.	There is a pen deep pool with standing water. Off the channel this transitions to a large basin with 100% vegetation cover, saturated soil, and shallow water.	See figure in Fisheries section for a map of DWR surveyed barriers to fish passage.
19	Horseshoe Bar Road to Wiskeybar Road	Bishop's Reach 18.	Residential <sup>2</sup>		None noted.	As for most stretches of Miners Ravine, Himalayan blackberry was dominant with a remnant oak overstory and adjacent landscaping.	None were noted.	See figure in Fisheries section for a map of DWR surveyed barriers to fish passage.
20	Whiskeybar Road to Newcastle Road	Bishop's Reach 19.	Open space and rural residential. <sup>2</sup>	Potential for increased residential development.	None were noted.	This area was dominated by Himalayan blackberry scrub. Species include willows, cottonwoods, fig, false bamboo, and some native understory species.	None were noted.	See figure in Fisheries section for a map of DWR surveyed barriers to fish passage.
21	Newcastle Road to End							
<b>False Ravine by Reach</b>								
1	Confluence with Miners Ravine to Secret Ravine Pkwy.			Open space		<p>There are two vegetation types mapped for False Ravine:</p> <p><u>Blue oak – Live Oak series with a annual grassland association (FRV1)</u> <b>Dominant trees species</b> are blue oak (<i>Quercus douglasii</i>), live oak (<i>Quercus wislizenii</i>), with California buckeye (<i>Aesculus californica</i>) and gray pine (<i>Pinus sabiniana</i>) present in lower numbers. <b>Grassland component</b> was made up almost exclusively of non-native annual grasses: soft brome (<i>Bromus hordeaceus</i>), ripgut brome (<i>Bromus diandrus</i>), Hedgehog dog-tail grass (<i>Cynosurus echinatus</i>), Mediterranean barley (<i>Hordeum marinum</i>), medusahead (<i>Taeniatherum caput-medusae</i>), and a native bulb, elegant brodiaea (<i>Brodiaea elegans</i>) were observed. No non-native woody species were documented.</p> <p><b>Wildlife observations:</b> One pair red of shouldered hawks were observed nesting.</p> <p><u>Willow species – Live Oak series with a Himalayan blackberry association (FRV2)</u> <b>The dominant tree species</b> are willows (<i>Salix spp.</i>) and live oak (<i>Quercus wislizenii</i>). <b>Shrubs</b> present are buttonwillow (<i>Cephalanthus occidentalis</i>) and California buckeye (<i>Aesculus californica</i>), with Himalayan blackberry (<i>Rubus discolor</i>) as the dominant species. <b>Additional species</b> were honeysuckle (<u><i>Lonicera spp.</i></u>), cattails (<i>Typha spp.</i>), and creeping spikerush.</p>		

Table 3.7a. Reach by Reach Tributary Descriptions, Land Use, Cultural Resources, and Biological Resources

Reach Number	Reach Name	Corresponding Reaches	Adjacent Land Use	Future Land Use	Cultural Resources	Vegetation and Wildlife Habitat Elements	Adjacent Wetlands/Tributaries	Fisheries Habitat Elements
2	Secret Ravine Pkwy. to Scarborough Drive			Open space		Blue oak – Live Oak series with a annual grassland association <a href="#">(ERV1)</a> and Willow species – Live Oak series with a Himalayan blackberry association <a href="#">(ERV2)</a> occur in this reach. The dominant tree species are willows ( <i>Salix spp.</i> ) and live oak ( <i>Quercus wislizenii</i> ). Shrubs present are buttonwillow ( <i>Cephalanthus occidentalis</i> ) and California buckeye ( <i>Aesculus californica</i> ), with Himalayan blackberry ( <i>Rubus discolor</i> ) as the dominant species. Additional species were honeysuckle ( <i>Lonicera spp.</i> ), cattails ( <i>Typha spp.</i> ), and creeping spikerush.		
3	Scarborough Drive to Saddlebrook Drive			Open space		Scattered oaks and willows.		
4	Saddlebrook Drive to Echo Ridge Road			Open space				
<b>Secret Ravine by Reach</b>								
1	Confluence with Miners Ravine to East Roseville Pkwy. (Reach corresponds with Bishop's (1997)		Urbanized <sup>2</sup>		None noted.	Riparian overstory with weedy and very disturbed understory <sup>2</sup> . White alder riparian forest and Great Valley riparian forest <sup>4</sup> .	None noted.	An abandoned waterline in this reach is potential barrier to fish passage in low flow periods. Although habitat unit data including type, depth, length, substrate, instream cover, canopy cover has been collected by Li and Fields and ECORP, no reach specific description has yet been developed.
2	East Roseville Parkway to around the Interstate 80/Highway 65 Interchange	Approximately ½ of Bishop's 1997 reach 2 ( East Roseville Parkway to near Rustic Hills Drive).	Open space and Highway I-80. <sup>2</sup> The creek parallels I-80 and, at spots, I-80 is immediately adjacent to the right bank.	Same; future major road crossing and commercial development	None noted.	Healthy riparian and upland overstory with a weedy understory <sup>2</sup> with vegetation types Great Valley riparian forest, live oak woodland, and naturalized annual grassland <sup>4</sup> . Extremely disturbed due to off road vehicle impacts (numerous dirt roads) and evidence of dumping (area was also a possible borrow and staging area for I-80 construction).	None noted.	Although habitat unit data including type, depth, length, substrate, instream cover, canopy cover has been collected by Li and Fields and ECORP, no reach specific description has yet been developed.
3	Interstate 80/Highway 65 Interchange to about Rustic Hills Drive	Approximately the upstream ½ of Bishop's (1997) reach 2 (East Roseville Parkway to near Rustic Hills Drive).	Open space with some low-density residential use on either side.			Great Valley riparian forest, live oak woodland, freshwater seep, white alder riparian forest, and naturalized annual grassland <sup>4</sup> . Portions of this reach were bare of any woody vegetation near the channel, and some areas of the bank were left bare due to off road vehicle use <sup>3</sup> .	One unnamed tributary.	Although habitat unit data including type, depth, length, substrate, instream cover, canopy cover has been collected by Li and Fields and ECORP, no reach specific description has yet been developed.
4	Rustic Hills Drive to Rocklin Road	Bishop's (1997) reaches 3 (near Rustic Hills Drive to Monument Springs Drive) and 4 (Monument Springs Drive to Rocklin Road).	Open space associated with the creek channel, with some low-density residential use on either side.		Significant bedrock mortars in this reach. <sup>2</sup> Some of the bedrock mortars are now in the streambed. <sup>3</sup>	The vegetation in this reach is live oak woodland and white alder riparian forest. <sup>4</sup> The downstream portion has a nice riparian and upland overstory and understory and a good assemblage of native species <sup>4</sup> . The upstream portion supports a mixed riparian community that is relatively narrow due to geologic formation. The understory has been cleared and the adjacent uplands, although described as "disturbed", exhibits nice vegetation and a good overstory. Exotic invasive species, such as Himalayan blackberry ( <i>Rubus discolor</i> ) and newly planted Eucalyptus ( <i>Eucalyptus</i> spp.) trees, are present <sup>4</sup> .	Sucker Ravine joins with Secret Ravine from the west and another unnamed tributary joins Secret Ravine from the east.	Although habitat unit data including type, depth, length, substrate, instream cover, canopy cover has been collected by Li and Fields and ECORP, no reach specific description has yet been developed.
5	Rocklin Road to Sierra College Blvd.	This reach corresponds to Bishop's (1997) reach 5.	Open space within the Sierra College campus.	Same; possible site of proposed detention reservoir		Mixed riparian complex with a good assemblage of native species and diverse microhabitat. Blackberry (presumed to be the exotic Himalayan blackberry) is dominant in some locations <sup>2</sup> with vegetation types Great Valley riparian forest, live oak woodland, and white alder riparian forest <sup>4</sup> . Microhabitat in and adjacent to the stream is diverse. Logs, rocks, and living and dead vegetation provide a greater level of habitat complexity.	Backwater wetland areas.	Although habitat unit data including type, depth, length, substrate, instream cover, canopy cover has been collected by Li and Fields and ECORP, no reach specific description has been developed.  Microhabitat in and adjacent to the stream is diverse. Logs, rocks, and living and dead vegetation provide a greater level of habitat complexity.

Table 3.7a. Reach by Reach Tributary Descriptions, Land Use, Cultural Resources, and Biological Resources

Reach Number	Reach Name	Corresponding Reaches	Adjacent Land Use	Future Land Use	Cultural Resources	Vegetation and Wildlife Habitat Elements	Adjacent Wetlands/Tributaries	Fisheries Habitat Elements
6	Sierra College Boulevard to Dias Lane	Bishop's (1997) reach 6 (Sierra College Boulevard to land use change to rural residential <sup>2</sup> ).	Open space and rural residential <sup>2</sup> .		None noted.	A nice riparian corridor except for Himalayan blackberry on banks. The upland is oak woodland habitat with star thistle dominant in the understory <sup>2</sup> . Vegetation types is live oak woodland, white alder riparian forest, and naturalized annual grassland. <sup>4</sup>	None noted.	Although habitat unit data including type, depth, length, substrate, instream cover, canopy cover has been collected by Li and Fields and ECORP, no reach specific description has yet been developed.
7	Dias Lane to Horseshoe Bar Lane	Bishop's (1997) reaches 7 (land use change to rural residential to Brace Road) and 8 (Brace Road to Horseshoe Bar Road).	Open space and rural residential <sup>2</sup> .		None noted.	Live oak woodland, white alder riparian forest, and naturalized annual grassland. Vegetation types occur up to Brace Road (assessment halted). <sup>4</sup> Significant vegetation units in the downstream portion include oak woodland uplands with exotic invasive species such as periwinkle ( <i>Vinca</i> spp.) and Himalayan blackberry ( <i>Rubus discolor</i> ). Some houses have lawns up to the edge of the creek. In the upstream portion, banks are somewhat vegetated with sparse riparian and an oak overstory <sup>2</sup> .	None noted.	Although habitat unit data including type, depth, length, substrate, instream cover, canopy cover has been collected by Li and Fields and ECORP, no reach specific description has yet been developed.
8	Horseshoe Bar Road to King Road	Bishop's (1997) reach 9.	Open space, public park, and rural residential <sup>2</sup> .		None noted.	The overstory includes alder ( <i>Alnus</i> sp.), and Valley and live oaks ( <i>Quercus lobata</i> and <i>Q. wislizenii</i> ). Seedlings of oak ( <i>Quercus</i> spp.) and cottonwood ( <i>Populus</i> spp.) were observed. The adjacent upland is composed of thick oak forest with nice diversity. There is a large Himalayan blackberry ( <i>Rubus discolor</i> ) population near Horseshoe Bar Road and some residential landscaping in this reach. <sup>2</sup>	One unnamed tributary. Wetland/riparian complex.	Although habitat unit data including type, depth, length, substrate, instream cover, canopy cover has been collected by Li and Fields and ECORP, no reach specific description has yet been developed.
9	King Road to Penryn Road	Bishop's (1997) reach 10.	Open space, park, and rural residential <sup>2</sup> .		None noted.	Significant vegetation elements include a thick overgrown riparian component, where Himalayan blackberry ( <i>Rubus discolor</i> ) and willow ( <i>Salix</i> spp.) dominate <sup>2</sup> . Also present is a Valley oak ( <i>Quercus lobata</i> ) forest and a weedy area composed of castor bean ( <i>Ricinus communis</i> ) and Virginia creeper ( <i>Parthenocissus</i> spp.). <sup>2</sup>	None noted.	Although habitat unit data including type, depth, length, substrate, instream cover, canopy cover has been collected by Li and Fields and ECORP, no reach specific description has yet been developed.
10	Penryn Road to Boulder Creek Road	Bishop's (1997) reach 11.	Open space and rural residential <sup>2</sup> .	Increased residential	None noted.	Significant vegetation elements include a riparian corridor with mixed native vegetation <sup>7</sup> and an upland composed of oaks ( <i>Quercus</i> spp.).	One unnamed tributary that joins with Secret Ravine in this reach.	Although habitat unit data including type, depth, length, substrate, instream cover, canopy cover has been collected by Li and Fields and ECORP, no reach specific description has yet been developed.
11	Boulder Creek Road to Rock Springs Road	Bishop's (1997) reaches 12 (Boulder Creek Road to near Aspen Drive) and 13 (Rock Springs Road-upstream and downstream).	Open space, park, and residential <sup>2</sup> .		None noted.	Significant vegetation elements in this reach include the riparian corridor with a mixed overstory, including mature cottonwoods ( <i>Populus</i> spp.), alders ( <i>Alnus</i> spp.), willows ( <i>Salix</i> spp.). The understory is a mixture of native species and non-native species, with quite a bit of Himalayan blackberry ( <i>Rubus discolor</i> ). The upland area is described as "mostly degraded" - area cleared by landowner.	A "major tributary" (Red Ravine) joins Secret Ravine at this reach. There is an "old farm pond" (Sewage Disposal Pond?) with substantial debris in this location. <sup>2</sup>	Although habitat unit data including type, depth, length, substrate, instream cover, canopy cover has been collected by Li and Fields and ECORP, no reach specific description has yet been developed.
12	Rock Springs Road to End							
Sucker Ravine by Reach								
1	Confluence with Secret Ravine to End							

<sup>1</sup> Foothill and Associates, 1999

<sup>2</sup>Bishop, 1997

<sup>3</sup>ECORP, 2003

<sup>4</sup>Holland, 2000

<sup>5</sup>Vanicek, 1993

<sup>6</sup> Dry Creek Urban Streams Restoration Project: This project is being advanced by the City of Roseville in partnership with the Dry Creek Conservancy. The Department of Water Resources Urban Streams Restoration Program provides funding. The project includes restoring a 1.4-mile reach of Dry Creek beginning at the Riverside Avenue Bridge and extending upstream to Adelante High School.

<sup>7</sup>GANDA (Garcia and Associates), 1998